Institution: University of Glasgow
Unit of Assessment: **17A – Geography, Environmental Studies and Archaeology: Geography**
Title of case study: **Influencing environmental policy and practice in Egypt at regional and national levels**

1. Summary of the impact (indicative maximum 100 words)

University of Glasgow research has resulted in a significant change to environmental and development policy at the highest levels of government in Egypt, with tangible grounded benefits for local populations in the regions affected. Briggs and Sharp, in close collaboration with Egyptian colleagues, have substantially shifted the priorities of Egyptian environmental management to include the knowledge, needs and priorities of local people, and especially to increase participation and recognition of women.

2. Underpinning research (indicative maximum 500 words)

Research has been undertaken since 1994 by John Briggs and Jo Sharp, Professors of Geography at the University of Glasgow, in collaboration with colleagues from South Valley University at Aswan. It is deeply embedded in the study area of Wadi Allaqi, but also scales up to investigate Egyptian policy-making with respect to both the environment and the country's semi-nomadic Bedouin population. Research grants from DFID funded the different strands making up the overall *Allaqi Project* between 1994 and 2005, and the research has been written up in a book and several international journal papers published between 1999 and 2009.

The role of indigenous knowledge in development

Conventional development theory suggests that scientific knowledge and indigenous knowledge are two separate and typically opposing ways of viewing the world, and that science must displace indigenous understandings for progress to be made in reducing poverty and other forms of disadvantage. While 'anti-development' theory tends to accept this oppositional view, only in reverse, Briggs and Sharp's work has insisted that such a binary view is too simplistic. Moreover, much of the literature on indigenous knowledge has focused on technical or artefactual aspects of different knowledge systems, thereby avoiding difficult questions about power relations (e.g. "whose voice counts?" in any given situation), hybrid forms of knowledge and issues of intergenerational knowledge transfer. Briggs and Sharp have researched in detail the environmental aspects of indigenous knowledge, as embedded within the specific local ecological contexts of the peoples concerned, and also as shaped by the complex social dynamics of particular communities and locations. They have demonstrated how the varieties of knowledge involved here frequently add something vital but often missing from less place-specific scientific knowledge, and they have directly addressed the fundamental challenge of bringing together indigenous and scientific environmental understandings into productive combinations sensitive to people and place.

The gendered construction of local (environmental) knowledge

While the notion of indigenous knowledge offers an important challenge to development theory and practice, a danger is that it can produce the sense of a single local 'community' which unproblematically shares the *same* indigenous knowledge. Briggs and Sharp's Allaqi research highlights the clear diversity between and even within different families occupying the same area. These differences are not only based on relative wealth and physical access to resources, but also on the different roles and opportunities available to men and women within Bedouin society. Patiently working with individuals and groups over a period of more than 15 years, the *Allaqi Project* has revealed Bedouin women's specific knowledge of the resources available to them in their immediate environment. The sources of this knowledge, as well as the complex politics shaping the extent to which Bedouin women can ever act upon this knowledge, were also uncovered by the researchers. Because these women are more sedentary than men, it was found that they possess a more in-depth knowledge of their local environment, whereas, because Bedouin men have greater contact with a wider range of other groups, they acquire a more diverse set of environmental knowledges deriving from many different sources and locations. Recognising gendered differences in knowledge, and men and women's differing abilities to act upon such knowledge, holds significant implications for policy development – not just in Egypt but globally – in

that a 'one size fits all' approach to development interventions, largely ignorant of such differences, has demonstrably failed to bring about meaningful socio-economic change.

3. References to the research (indicative maximum of six references)

(Quality assurance: all journal outputs listed are in reputable refereed academic journals, and the book is with a reputable publisher)

Briggs J, Badri M and Mekki A M (1999) Indigenous knowledges and vegetation use among bedouin in the Eastern Desert of Egypt. *Applied Geography*, 19: 87-103 [DOI: 10.1016/S0143-6228(98)00037-x]

Briggs J, Sharp J, Hamed N and Yacoub H (2003) Changing women's roles, changing environmental knowledges: evidence from Upper Egypt. *Geographical Journal*, 169: 313-325 [DOI: 10.1111/j. 0016-7398.2003.00095.x]

Sharp J, Briggs J, Hamed N and Yacoub H (2003) Doing gender and development: understanding empowerment and local gender relations. *Transactions of the Institute of British Geographers*, 28(3): 281-295 [DOI: 10.1111/1475-5661.00093]

Briggs J and Sharp J (2004) Indigenous knowledges and development: a postcolonial caution. *Third World Quarterly* 25(4): 661-676 [DOI: 10.1080/01436590410001678915]

Briggs J, Sharp J, Yacoub H, Hamed N and Roe A (2007) The nature of indigenous environmental knowledge production: evidence from Bedouin communities in Southern Egypt. *Journal of International Development* 19: 239-251 [DOI: 10.1002/jid.1337]

Belal A, Briggs J, Sharp J and Springuel I (2009) *Bedouins by the Lake: Environment, Change and Sustainability in Southern Egypt*. American University in Cairo Press: Cairo and New York. ISBN 9789774161988 (**Briggs**[3] in REF2; and please see associated textbox there regarding link with Oxford University Press)

Research grant income supporting the research (most grants listed here led by GU but jointly awarded with the Centre for Environmental Studies and Development, South Valley University)

2003-05, DFID Gender and Development Programme "Women's literacy and handicraft programmes", £8,750.

2002-05, DFID Academic Link between South Valley University, Aswan, Egypt, and University of Glasgow, "Natural resource management for sustainable development in arid environments", £21,000.

2002, DFID Gender and Development Programme "Bedouin women's development programme, Wadi Allaqi, South Eastern Desert, Egypt", £9,970.

2001-04, DFID, "Natural resource management for sustainable development in arid environments", £27,000.

2001-04, DFID (ESCOR) "Indigenous environmental knowledges and sustainable development in semi-arid Africa", £95,411.

2000-01, DFID Gender and Development Programme "Bedouin women and sheep production in Upper Egypt", £8,950.

1998-01, DFID "Sustainable natural resource management and development in arid environments", £30,000.

1994-98, British Council/ODA "Collaborative research on environmental management and indigenous knowledge in arid environments", £35,000.

4. Details of the impact (indicative maximum 750 words)

Regional/Governorate level

Wadi Allaqi is a 'protected area' under the control of the Egyptian Environmental Affairs Agency (EEAA) within the Ministry of State for Environmental Affairs (MSEA), and it is a UNESCO-designated biosphere reserve. The region's significance lies in its arid environment and the combination of two ecosystems (extreme arid desert and the shores of Lake Nasser) inhabited by semi-nomadic Bedouin people. Wadi Allaqi is located in the Governorate of Aswan, the southernmost governorate in Upper Egypt, where the planning executive had historically based its approach to development on the use of scientific and technological solutions to poverty reduction. This approach had ignored the knowledge underpinning indigenous Bedouin everyday practices,

denying that the Bedouin were capable of defining their own needs and priorities. Challenging these assumptions, research from the mid-1990s by Briggs (later with Sharp) has demonstrated that the Bedouin possess a detailed, practical and often sophisticated understanding of environmental resources available in the region. The Director of the Aswan Regional Planning Centre was convinced by the robustness of the research findings, and in the late-1990s introduced the principle of incorporating the views and knowledge of Bedouin communities into all regional planning decisions. This inclusivity was incorporated into the management structure of the Wadi Allaqi Biosphere Reserve when it formally became a protected area under EEAA auspices in the mid-1990s, and so "the impacts of the Glasgow research project have very much continued to be felt up to the present day" (Aswan Director [elect] of the EEAA: e-mail letter, 23/10/2013).

In further research conducted through to 2005, Briggs and Sharp have shown that women in these communities, usually 'invisible' in economic, political and social terms, have specific local environmental knowledges with unrealised potential. On a practical level, the findings influenced the establishment and development of small farms in Wadi Allaqi, initially by two pioneering widows in 2001. Other women became involved, and eventually, by the time of writing, every family group in the area (around 20 families) has taken up crop production based on Lake Nasser irrigation water. Explicit recognition of the possibilities for small-scale farming – latent within the long-standing knowledge base of the Bedouin, especially the women – was pivotal to the Glasgow research, and this recognition has guided more recent research and pilot schemes (source **7**). From the situation where the Bedouin of Wadi Allaqi had never cultivated land, the ongoing impact of the Glasgow research is hence that every family group now has a small irrigated plot of land growing food and fodder, which contributes significantly to food security in the region.

Growing confidence underpinned by recognition of their contribution also led the Bedouin women, supported by the researchers, to request basic literacy classes for their children. They secured classes for all children in the area, 45 in total (22 girls and 23 boys), and classes have since extended to approximately 130 women in the Wadi Allaqi community (sources **4**, **5**, **6** and **8**). The strengthened role, economic contribution and position of Bedouin women in Wadi Allaqi was paralleled by the establishment of an active women's NGO in 2003. This NGO, chaired by a former research collaborator with Briggs and Sharp (see below), has continued to participate in educational and training activities, most recently in handcraft and literacy classes.

National level

The research conducted in Wadi Allaqi was carefully monitored by the EEAA as a pilot study for how the principles of environmental management in Egypt might be revised to include local people's knowledge, needs and priorities. The researchers duly influenced a significant shift in national policy from the traditional development or conservation model to one involving greater partnership between 'experts' and the inhabitants, notably the women, of the 'protected areas'. Following an *Allaqi Project* workshop in December 2002, attended by the then Director of the Nature Conservation Sector in the EEAA, the policy approach shaped by the Glasgow research was rolled out to all of Egypt's Protected Areas and Reserves, now numbering 30 with the addition of one further area in 2012, creating a positive impact that persists today for approximately 10,000 inhabitants of these areas occupying around 15% of the country's total land area.

In 2003 a specific EEAA set of actions called 'The Contribution of the Local and Urban Community' was reported, the third initiative of which stated that "the Ministry [MSEA] is interested in the gender issues and its relation with the management of the natural resources" (source **9**). In May 2005, the *Egypt State of the Environment Report 2004*, was explicit about bringing women and children into the heart of both its 'biodiversity' (Chap.6) and its 'human resources development' (Chap.13f) strategies, with mention made of how "[p]rotected areas give special concern to Bedouin women who are the real cornerstone in such communities" (p.80: source **10**). The Director who attended the 2002 *Allaqi Project* workshop was a key participant – with a particular brief for both biodiversity and 'protected areas' – in preparing *The National Environmental Action Plan of Egypt 2002/17*, which has set the frame for the country's environmental policy to the present. That Director is now (at the time of writing) a Ministerial Advisor on Biodiversity in the Egyptian Cabinet of Ministers, and he has explicitly stated that the ongoing national policy changes outlined here resulted from his encounter with ideas and findings from the *Allaqi Project*: "This policy change was based on my

being informed and influenced by the research evidence base produced by the Allaqi Project Research Team" (letter to Principal, University of Glasgow, 14/02/2012).

Capacity-building

As a deliberate strategy, the Glasgow researchers have always collaborated closely with local academics, seeking to foster two-way knowledge exchange and to assist in capacity-building for researchers from the Global South. Around 50 Egyptian students and early career researchers have benefitted from a late-1990s to mid-2000s DFID/British Council academic link grant scheme between South Valley and Glasgow Universities. A botany PhD student was sufficiently influenced by her involvement with the women's development aspect of the *Allaqi Project* to adopt it as a guiding light for her subsequent career in both research and policy. She is about to become the Aswan Director of the EEAA, acts as the Chair of the above-mentioned woman's NGO and has also taken on other roles in conserving the natural and cultural heritage of Upper Egypt. She has coordinated research for two recent reports (*Agropastoralism* and *Informal Education*: both 2012 [sources **7** and **8**]), the recommendations from which continue the approach to Bedouin 'farming' and girls' education fostered by Briggs and Sharp from the mid-1990s

She herself embodies and actively builds upon the ongoing impact of the Glasgow research, securing and extending the legacy of that research, as well as serving – through her EEAA post and also networking/providing training on an Egyptian and international stage (in Jakarta, Indonesia and Washington, DC) – as another vector for scaling up the impact of the Glasgow research from regional to wider levels of policy and practice. As she reflects upon the overall role that she has acquired: "This is a role that is very rare for women to have in Upper Egypt and I see it as having come directly from my initial involvement in the research project with Profs Briggs and Sharp" (e-mail letter, 23/10/2013). The impact claimed in this case study thereby ranges from the most personal, as in the instance of this particular individual, through the regional transformation of Wadi Allaqi to that of changing Egyptian national environmental and development policy.

5. Sources to corroborate the impact (indicative maximum of 10 references)

1. **Aswan Director (elect) of the Egyptian Environmental Affairs Agency (EEAA) and Chair of the Women and Development in Wadi Allaqi NGO** (can verify impacts at personal/regional level with a gendered dimension, and also ongoing impact of the Glasgow research through to the present day);
2. **Ministerial Advisor on Biodiversity in the Cabinet of Ministers of the Government of Egypt** (can verify ongoing impact on national environmental policy, but also claims about the regional impacts);
3. **Director of the Western Desert (Egypt) Protected Areas** (can verify claims about the ongoing regional impact at the scale of the Biosphere Reserves).

Textual sources relating to (i) regional (Wadi Allaqi) and (ii) national (Egyptian) impacts:

4. *UNITWIN/UNESCO Chairs Programme Progress Report, Egypt (82)*, *Period of Activity, January-December, 2003*, c.2003 (http://www.unesco.org/education/unitwin/reports_en/egypt82.pdf), p.7
5. *Women's Development Project, Wadi Allaqi, Egypt, Final Report of GAD Projects, 2002-2004*, c.2005 (http://epasp.org/documentation/WDPReport.pdf)
6. *Wadi Allaqui, Biosphere Reserve, Women's Development Project and Literacy, Final Report of GAD Projects, 2002-2004*, c.2005 (http://www.unesco.org/mab/doc/biodiv/WadiAllaqui_Egypt.pdf)
7. *Agropastoralism as Strategy for Sustainable Conservation and Livelihood*, 2012 (The Rufford Small Grants Foundation, UK) (http://www.rufford.org/rsg/projects/hoda_yacoub)
8. *Informal Education Programme for Bedouin Girls*, c.2012 (ExxonMobil and CEDPA, USA, report: copy available from the HEI upon request)
9. *Achievements and Planned Activities, 2002-2003: The Contribution of the Local and Urban Communities*, EEAA, c.2003 (http://www.eeaa.gov.eg/English/main/accomp25.asp)
10. *Egypt State of the Environment Report 2004*, EEAA, 2005 (http://www.eeaa.gov.eg/English/info/report_soe2005.asp)